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So you want a cold-tolerant or hardy fig tree?

Welcome to the right place. The internet is littered with incorrect and regurgitated fig-related information. Especially on fig tree hardiness. Let this article be a guide to set the record straight and what's really accurate and reasonable so that you can make an informed decision.

As always feel free to subscribe to the Fig Boss newsletter at the top of the page for more fig-related content like this.

Fig tree hardiness zone

A fig tree's hardiness is the maximum low temperature a fig tree can withstand without the branches dying or taking damage. Believe it or not, this maximum winter low is hardwired into each fig varieties' genetic code. Take a 7-foot center in the NBA for example. The average person doesn't have the genetic potential to reach 7 feet in height so choosing the right variety is critical to see success.

Most fig varieties can reliably survive 10F, but much fewer varieties can survive 5F and very few at all can survive 0F. This means that the USDA hardiness zones for fig trees bottom out at 6A with winter protection, 7A without winter protection (although I recommend it in this zone), and 7B (usually no winter protection is necessary).

Related: The Ultimate Guide to Wrapping Fig Trees: Protecting Your Trees and Buds for Spring

A fig variety called Chicago Hardy is the most well-known fig variety to withstand colder temperatures. It's certainly the standard and the most hardy fig until another variety can reliably reproduce better results in very cold climates. However, there are some lesser-known fig varieties that give growers a lot of options in addition to Hardy Chicago. I hope to be able to say one day that there's an even better variety that could extend the reach where fig trees can be reliably grown.

Let's now talk about some of the most cold hardy fig varieties in existence.

Cold-tolerant fig tree varieties

During the winter of 2021-2022, over 100 fig tree varieties were put to test in my yard to see which would survive and which wouldn't. I saw a low of 6F and my trees were unprotected the entire winter.

I would highly recommend watching this video to see the results from the 2021-2022 winter fig tree hardiness experiment:

These are the fig varieties that faired the best:

Hardy Chicago

Hardy Chicago aka Chicago Hardy, GE Neri, Azores Dark, Conde, Malta Black & Sicilian Dark. Easily reproducible to survive a 0F winter low.

Teramo

Like Hardy Chicago, this fig also has exceptional hardiness. Found in Maryland by Bill Lauris of offthebeatenpathnursery.com

Florea aka Michurinska 10

This fig variety also goes by the name Michurinska 10. Europe's most popular fig variety for colder climates. Commonly grown colder countries like Bulgaria, Hungary, Germany & Belgium.

St. Martin

Vladimiro of viaggiatore971.blogspot.com has relayed this information from another source that it is supposed to survive -25C. That's incredible if proven true!

Campaniere

Thierry of figuesdumonde.wordpress.com has told me this about Campaniere, “Campaniere survived a harsh winter in February of 2012. There were 10 days of frost. During the day it was -5C and in the nighttime it reached -20C (-4F). After all of that, even the buds were intact.

The Campaniere mother tree is about 140 years old, but there is a younger one about 20 years old who is in the wind and has good resistance too. They are in a draining place and we should not neglect the limestone and potassium to help the tree to resist the cold."

Longue d'Aout

A classic and underappreciated fig variety for cold climates. Some believe that it can survive temperatures below 0F.

Green Michurinska aka Verdino or White Adriatic

Green Michurinska is originally from a Bulgarian commercial fruit grower named Penandpike. Where the Mother tree is located, this tree is no stranger to cold winter lows yet the tree is massive proving that it can handle cold temperatures.

English Brown Turkey aka Olympian

The most well-known and hardy fig found in Denmark called Bornholm. A similar fig that you may have heard of called LaRadek's English Brown Turkey was claimed to have survived the brutal European winter of 2012.

Robert Harper in Connecticut said this about it, "This fig was discovered in a zone 6a location, in the village of Kyjovich, in the Czech Republic. It has been grown there in a protected location for 18 years. But, grown without winter cover, and still produces a breba crop. It is reported to be able to survive minus 18 degrees Fahrenheit, once it has reached maturity.

Pastiliere

A classic variety found all over Europe that easily belongs in the category of the most hardy fig varieties. Marcello at planetfig.com says that it has excellent hardiness.

Other fig varieties that survived my hardiness experiment that saw a 6F winter low:

- **Kutfeji Black - Similar to Black Mission (another hardy variety)**
- **JH Adriatic aka White Adriatic**
- **Moro de Caneva or Figo Moro da Caneva**

- **Nerucciolo d'Elba**
- **Verdino del Nord (VR) or Figoin**
- **Celeste**
- **LSU Tiger - a child of Celeste**
- **LSU Hollier - a child of Celeste**
- **Sefrawi**
- **Sementino Rosso**

Other hardy fig varieties worth mentioning based on my own prior experiences and other grower's experiences:

- **White Marseilles aka Lattarula**
- **Godfather aka Osborne Prolific**
- **Demos Unk**
- **Ronde de Bordeaux**
- **Black Mission**
- **Carmelitana**
- **White Triana**
- **Dalmatie aka Stella**
- **Coll de Dama**
- **Columbaro Nero**
- **LSU Purple - a child of Celeste**
- **Brooklyn White**
- **Atreano**
- **Violette de Bordeaux**

- **Dall'Oso**
- **Blanche de Deux Saison**
- **Calderona**
- **Colonel Littman's Black Cross**
- **I258**
- **Black Madeira**

Fig Tree Care in the Winter

It's possible that just planting a cold-tolerant fig tree is not enough. In zones 6B & 7A, 0F is a very likely possibility every winter. When temperatures drop below 0F, fig tree winter survival is unlikely. This is where the proper fig tree care during the winter comes in.

There is a huge number of creative fig tree winter protection ideas. These are some of my favorites:

- **Wrapping - by gathering all of your fig tree branches in close and wrapping them with burlap, blankets, and tarps, you're giving your fig tree protection from the wind and cold.**
- **Bending branches to the ground and covering them - by bending the branches to the ground, you're getting them closer to a key heat source in the winter, the soil. Simply tie them to the ground and cover them with any insulative material you have on hand like housing insulation, concrete blankets, and mulch.**
- **Mulch rings - create a mulch ring out of chicken wire by simply creating a ring around your fig tree with chicken wire. Fill in the ring with mulch materials like leaves or wood chips.**

Related: Fig Trees in Zones 5, 6, & 7: A Masterclass on Hardy Fig Trees in Cold Climates

Understanding Lignification and Its Impact on Cold Resistance

Lignification is the process by which plant tissues become woody and rigid due to the deposition of lignin in cell walls. This structural change is crucial for fig trees in colder climates because it:

1. **Reduces Water Content in Cells: Water inside plant cells is prone to freezing, which can cause cell rupture. Lignified branches have lower water content, making them more resistant to freeze damage.**
2. **Strengthens Cell Walls: Increased lignin reinforces cell walls, reducing the impact of ice formation and preventing structural damage.**
3. **Enhances Overall Cold Resistance: A well-lignified tree can withstand lower temperatures compared to one that has not properly hardened off.**

Lignification vs. Hardy Fig Varieties

Many fig growers rely on hardy varieties like Hardy Chicago for winter survival. However, even the hardiest fig tree will suffer winter damage if it lacks proper lignification. In fact, a Hardy Chicago fig with poor lignification may sustain significant damage at 20-25°F, while a well-lignified tree of a less hardy variety may survive even lower temperatures.

This discrepancy highlights why lignification is a more critical factor than simply choosing a hardy variety. If lignification were equal across all fig varieties, hardier ones would certainly prevail. However, in reality, lignification varies based on growth conditions, pruning practices, and climate adaptation.

The Real Limits of Fig Tree Cold Tolerance

A key question for growers in USDA zones 5, 6, and 7 is: How hardy are fig trees exactly? Can they be pushed past their typical limit of 0°F? The truth is, there is no definitive answer yet. Many new fig growers rely on nursery catalogs that list a broad range of growing zones without considering lignification. As a result, unrealistic expectations lead to disappointment when fig trees fail to survive the winter.

Factors Affecting Lignification

Several factors influence how well a fig tree lignifies, including:

- **Geographic Location: Fig trees grown outside their native climate often struggle to lignify fully.**
- **Excessive Pruning: Over-pruning disrupts hormonal balance, leading to excessive vegetative growth instead of lignification.**
- **Winter Damage: Trees suffering from winter damage experience hormonal imbalances, delaying proper lignification.**

Related: Pruning Fig Trees | How Much to Prune & How to Keep Them Small

Strategies to Improve Lignification and Cold Tolerance

To improve lignification and enhance winter survival, fig growers should implement the following practices:

Provide Winter Protection for One to Two Seasons

- **Protect young or weakly lignified fig trees until they develop proper cold resistance.**
- **Bending trees and covering them is an effective winter protection method.**

Understand Hormonal Balance and Pruning

- **Improper lignification is often linked to a hormonal imbalance that favors growth over fruiting.**
- **Over-pruning or excessive winter damage causes fig trees to continue growing late into the season, preventing them from lignifying before dormancy.**
- **Proper pruning and winter protection allow trees to lignify earlier, cease growth in summer, and become hardier over time.**

Breaking the Vicious Cycle: Why Winter Protection is Critical

Fig trees that have been pruned too much or suffered cold damage enter a cycle of poor lignification. Their imbalance of growth hormones results in late-season vegetative growth, making them vulnerable to winter damage. Once apical and lateral buds are preserved through winter protection, trees regain hormonal balance, leading to:

- **Earlier fruiting**
- **Increased fruit production**
- **Higher fruit quality**
- **Improved lignification and cold resistance**

Key Takeaways for Cold Climate Fig Growers

- **Lignification is more important than variety selection when it comes to cold tolerance.**
- **Brown or grey-colored branches indicate proper lignification, while green branches are more vulnerable to cold.**
- **Growth must stop in summer for lignification to proceed properly; it will not advance significantly once leaves fall.**
- **Excessive pruning delays lignification, making trees more susceptible to winter damage.**
- **Young fig trees need winter protection, even in growing zones 8A or lower.**
- **A single season of proper pruning and protection can significantly improve a fig tree's cold tolerance.**

Proper Lignification of fig trees is discussed in great detail in the video below:

You should now be well on your way to a cold hardy fig tree

This article is a valuable resource for anyone looking to grow cold-tolerant fig trees. By discussing the critical role of winter hardiness in determining a fig tree's ability to survive, and highlighting the best fig varieties to choose from, it provides a clear and actionable guide to growing successful fig trees in cold climates.